

What is claimed is:

1. An apparatus for flattening a substrate against a surface of a platform, said apparatus comprising:

one or more left-sided guides positionable with respect to said platform, each having a generally flat, top left protrusion; and

one or more right-sided guides positionable with respect to said platform, each having a generally flat, top right protrusion,

wherein at least one of said guides is movable in a direction perpendicular to said surface so that its respective protrusion is positionable above, below or at said surface and when said substrate is on said platform one of said left-sided guides and one of said right guides are positionable so that their respective protrusions lie above said substrate.

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2. The apparatus of claim 1, wherein at least one of said guides is movable so as to vary a distance between said movable guide and another of said guides.

3. The apparatus of claim 1, further comprising one or more z-motion units, each coupled to a respective one of said guides, able to move said guides in a direction perpendicular to said surface.

4. The apparatus of claim 1, further comprising a movement controller coupled to said z-motion units.

5. An apparatus for flattening a substrate against a surface of a platform, said apparatus comprising:

a left-sided guide positionable with respect to said platform having a generally flat, top left protrusion; and

a right-sided guide positionable with respect to said platform having a generally flat, top right protrusion,

wherein at least one of said guides is able to exit a first position within said platform and to enter another position within said platform and when said substrate is on said platform said left-sided guide and said right guide are positionable so that their respective protrusions lie on said substrate.

5 6. A printing system comprising:

at least one print head; and

an apparatus for flattening a substrate against a surface of a platform, said apparatus comprising:

one or more left-sided guides positionable with respect to said table, each having a generally flat, top left protrusion; and

one or more right-sided guides positionable with respect to said table, each having a generally flat, top right protrusion,

wherein at least one of said guides is movable in a direction perpendicular to said surface so that its respective protrusion is positionable above, below or at said surface and when said substrate is on said platform one of said left-sided guides and one of said right guides are positionable so that their respective protrusions lie on said substrate so that said at least one print head is able to move in close proximity to said substrate without coming in contact with said substrate or said guides.

7. An apparatus for flattening a first edge and a second, opposite edge of a substrate having a lower face substantially in contact with a surface of a platform, the apparatus comprising:

one or more first guides positionable within said platform, each first guide having a first L-shaped cross-section such that if said first guide is positioned so as to protrude above said surface, a portion of said first guide generally parallel to said lower face abuts a strip of an upper face of said substrate along all or part of said first edge and a portion of said first guide generally perpendicular to said lower face abuts all or part of said first edge; and

one or more second guides positionable within said platform, each second guide having a second L-shaped cross-section such that if said second guide is positioned so as to protrude above said surface, a portion of said second guide generally parallel to said lower face abuts a strip of an upper face of said substrate along all or part of said second edge and a portion of said second guide generally perpendicular to said lower face abuts all or part of said second edge,

wherein a distance between said first edge and said second edge determines whether to position any of said guides so that they do not protrude above said surface and determines which one of said first guides and which one of said second guides are selected to abut said first edge and second edge respectively.

20 8. The apparatus of claim 7, wherein at least one of said guides is movable in a direction parallel to said surface and perpendicular to said first edge.

9. The apparatus of claim 7, further comprising one or more z-motion units, each coupled to a respective one of said guides, able to move said guides in a direction perpendicular to said surface.

5 10. An apparatus for flattening a first edge and a second, opposite edge of a substrate having a lower face substantially in contact with a surface of a platform, the apparatus comprising:

a first guide having a first L-shaped cross-section and positionable within said platform so that a portion of said first guide generally parallel to said lower face abuts a strip of an upper face of said substrate along all or part of said first edge and a portion of said first guide generally perpendicular to said lower face abuts all or part of said first edge;

10 two or more openings within said platform that are generally parallel to said first edge and said second edge; and

15 a second guide having a second L-shaped cross-section and positionable within said platform so that a portion of said second guide generally parallel to said lower face abuts a strip of said upper face along all or part of said second edge and a portion of said second guide generally perpendicular to said lower face abuts all or part of said second edge,

20 wherein a distance between said first edge and said second edge determines in which of said two or more grooves to position said second guide.

11. A method comprising:

positioning guides within a platform so that opposite edges of a substrate whose lower face is substantially in contact with a surface of said

platform do not come in contact with a tool moving in close proximity over an upper face of said substrate.

12. The method of claim 11 further comprising:
moving at least one of said guides in a direction perpendicular to said surface.

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13. The method of claim 11 further comprising:
moving at least one of said guides so as to vary a distance between said movable guide and another of said guides.

14. A method comprising:
positioning guides within a platform so that opposite edges of a substrate whose lower face is substantially in contact with a surface of said platform do not come in contact with at least one print head in close proximity over an upper face of said substrate; and
printing said substrate.

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